

Claim Amendments

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claims 1-11. (Canceled)

Claim 12. (New) A method for manufacturing an optical waveguide chip comprising a core portion as an optical waveguide, a clad portion, which is composed of a lower clad layer and an upper clad layer and which is formed around the core portion, and an optical fiber guide portion for positioning an optical fiber which is to be connected with the core portion, each appropriately positioned on a supporting substrate, comprising:

forming said core portion, said clad portion, which is composed of said lower clad layer and said upper clad layer, and said optical fiber guide portion from appropriately positioned radiation-sensitive polysiloxane composition on the substrate, whereby the patterning of the positioned radiation-sensitive polysiloxane composition into the components of the optical waveguide components is developed by treatment with an alkali developing agent; and

wherein the upper clad layer and the optical fiber guide components are formed simultaneously as they are patterned during the alkali development.

Claim 13. (New) The method for manufacturing an optical waveguide chip according to claim 12, wherein the optical waveguide chip is connected to a single-mode optical fiber.

Claim 14. (New) The method for manufacturing an optical waveguide chip according to Claim 12, wherein an optical filter insertion hole, through which an optical filter is inserted and is positioned so that it intersects said core portion, is formed concurrently with the core portion, the lower clad layer and the upper clad layer.

Claim 15. (New) The method for manufacturing an optical waveguide chip according to Claim 12, which further comprises inserting and fixing a dielectric multilayer filter as the optical filter in said optical filter insertion hole.

Claim 16. (New) The method for manufacturing an optical waveguide chip according to Claim 12, wherein the radiation-sensitive polysiloxane composition contains a photo-acid generator.

Claim 17. (New) The method for manufacturing an optical waveguide chip according to Claim 12, wherein all of the material of the optical fiber guide portion is the same as the material of the clad portion.